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April 27, 2016

Ms. Carmen Santos and Steve Armann
Regional PCB Coordinator
US Environmental Protection Agency, Region 9
75 Hawthorne Street
Mail Code: WST-5
San Francisco, California 94105

Subject: Removal and Disposal of PCB-Containing Soil Associated with the Relocation of the Groundwater Treatment System at the Old Town Demolition Project

Ms. Santos and Mr. Armann,

The purpose of this letter is to document discussions during a progress meeting on April 15, 2016 with the Environmental Protection Agency (EPA) and a follow-up call with Ms. Santos on April 19, 2016 regarding relocation of an existing groundwater treatment system (GWTS) at the Old Town Demolition Project (Project). The GWTS must be relocated in order to clean up radiologically contaminated soil beneath its current location. The cleanup is being conducted as part of Phase I of the Project, with excavation of radiologically contaminated concrete, utilities, and soils currently in progress.

Requirement to Operate the Groundwater Treatment System
Operation of the GWTS is required by the Department of Toxic Substances Control (DTSC) as a corrective measure for remediation of contaminated groundwater in and around the Old Town area, and the relocation will be conducted in accordance with terms of an approval of the relocation issued by DTSC. The GWTS is currently located to the north of Building 5. The new location is to the east of Building 5, and includes installation of a new retaining wall immediately west of the new GWTS location, as shown in the figure provided below.

Soil Sampling
Lawrence Berkeley National Laboratory (LBNL) recently collected samples from six locations at and around the approximately 200-square-foot area slated for the new GWTS location. As shown in the figure, low concentrations – from 0.098 to 4.9 milligrams per kilogram (mg/kg) – of polychlorinated biphenyls (PCBs) were identified in shallow soil (0.25 to 1 feet below ground surface [bgs]) in a limited area (estimated to be less than 100 square feet) at the new GWTS location. LBNL intends to remove PCB-contaminated soils in this area.

Further, LBNL will collect additional characterization samples to determine PCB concentrations in soil 1) in the footprint of the new GWTS pad; 2) along the new retaining wall; 3) and within a two- to three-foot wide buffer area extending beyond the pad and the wall, except to the west of a retaining wall near the pad and where existing utilities prevent sample collection.

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Characterization samples will be collected in conformance with Title 40 of the Code of Federal Regulations (CFR) Section 761, Subpart N, and analyzed for PCBs in accordance with the provisions specified in the *Sampling and Analysis Plan, PCB Data Gaps, Concrete and Soil, Old Town Phase 1 Demolition,* Rev 0, September 2015 shared with the EPA in 2015. Samples will be collected in all areas that have not already been characterized from which soil will be removed. Soil samples will be collected at 0.25, 1, 2, 3, and 4 feet bgs, and deeper if contamination is found at 4 feet bgs. Based on available process knowledge and existing soil characterization data, PCB concentrations in the area should be less than 50 mg/kg, and PCBs are not expected to be present at a depth beyond 4 feet bgs.

Soil Excavation

Contaminated soil beneath the new GWTS pad and within the two- to three-foot buffer will be excavated to a depth of at least one foot below the deepest soil interval in which PCBs are detected at concentrations greater than the 0.94 mg/kg cleanup goal proposed in the *Application for Cleanup of Polychlorinated Biphenyls, Old Town Demolition Phase I Project* (*Cleanup Plan*) submitted to the EPA on March 25, 2016 and expected to be approved by the EPA in April 2016. Soil will also be removed to approximately 5 feet bgs in the area at which the new retaining wall will be installed, and to approximately 20 feet bgs for installation of supports (soldier piles) for the retaining wall. Some soil may be excavated prior to the receipt of all characterization data due to the demolition contractor's resource constraints; however, the pending data will be reviewed once available and used to determine the need for any additional excavation.

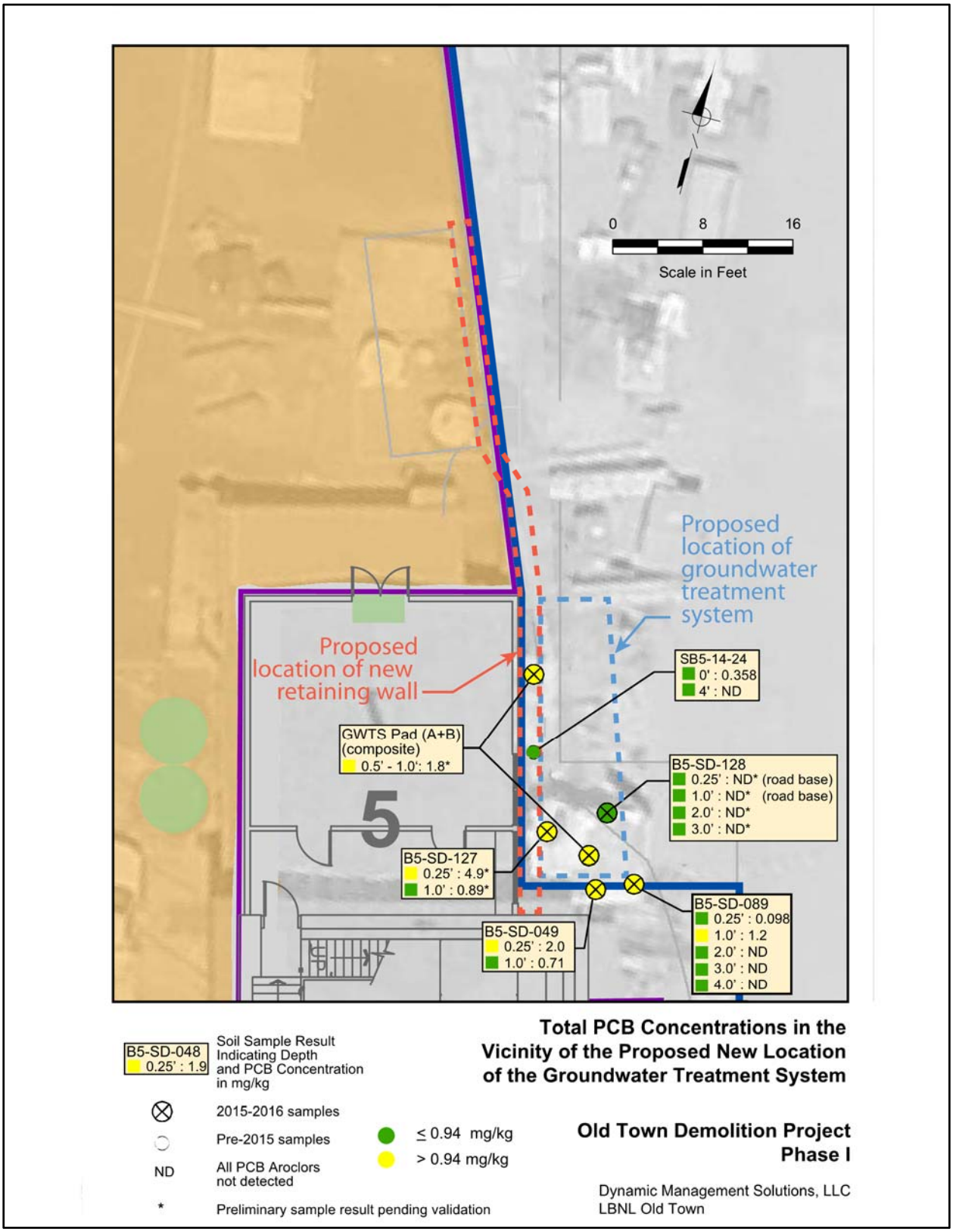
Decontamination of equipment used to remove PCB-contaminated soil will be performed in conformance with the requirements of 40 CFR Section 761.79(c)(2) or the procedures for decontamination described in the *Cleanup Plan*, as approved by the EPA.

Post-Excavation Soil Sampling

Following removal of PCB-contaminated soil, cleanup verification sampling will be performed in accordance with 40 CFR Section 761, Subpart O. The cleanup goal of 0.94 mg/kg per the *Cleanup Plan* and applicable provisions of Subpart O will be used to determine whether cleanup has been completed.

Soil Disposal

Soil containing PCBs will be disposed of in accordance with 40 CFR 761.61(a)(5). In the event that the soil to be removed for the GWTS relocation is determined to be impacted with radionuclides, LBNL will designate it as PCB radioactive waste and if the PCB concentrations exceed 50 mg/kg, manage it in compliance with the requirements of 40 CFR 761.50(b)(7). The intent is to dispose of any radiologically impacted soil at the Nevada National Security Site, in either a Resource Conservation and Recovery Act (RCRA) or non-RCRA cell, depending on the concentration of PCBs in the waste.


0
8
16
Scale in Feet
Proposed location of groundwater treatment system
Proposed location of new retaining wall
SB5-14-24
0' : 0.358
4' : ND
GWTS Pad (A+B) (composite)
0.5' - 1.0': 1.8*
B5-SD-128
0.25' : ND* (road base)
1.0' : ND* (road base)
2.0' : ND*
3.0' : ND*
5
B5-SD-127
0.25' : 4.9*
1.0' : 0.89*
B5-SD-089
0.25' : 0.098
1.0' : 1.2
2.0' : ND
3.0' : ND
4.0' : ND
B5-SD-049
0.25' : 2.0
1.0' : 0.71
B5-SD-048
0.25' : 1.9
Soil Sample Result Indicating Depth and PCB Concentration in mg/kg
2015-2016 samples
Pre-2015 samples
ND
All PCB Aroclors not detected
*
Preliminary sample result pending validation
≤ 0.94 mg/kg
> 0.94 mg/kg
Total PCB Concentrations in the Vicinity of the Proposed New Location of the Groundwater Treatment System
Old Town Demolition Project
Phase I
Dynamic Management Solutions, LLC
LBNL Old Town

Based on our telephone conversation on April 19, 2016, LBNL understands that the EPA can provide expedited approval for the cleanup of soil containing PCBs at the new GWTS pad and at the retaining wall. LBNL appreciates the EPA's continuing efforts to support the project in a timely manner.

Please contact Joe Gantos at njgantos@lbl.gov or 510-486-5077, Ron Pauer at ropauer@lbl.gov or 510-486-7614, or me at RDCronin@lbl.gov or 510-495-2849 if you have any questions or concerns.

Sincerely,

Robert Cronin
Project Director
Old Town Demolition Project

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